

***United States Court of Appeals
for the Second Circuit***



**PETITIONER'S
REPLY BRIEF**

77-4157

CORRECTED COPY

No. 77-4157

**United States Court of Appeals
For the Second Circuit**

NATURAL RESOURCES DEFENSE COUNCIL, INC.,
Petitioner,

vs.

UNITED STATES NUCLEAR REGULATORY COM-
MISSION and UNITED STATES OF AMERICA,
Respondents.

Petition for Review of an
Order of the Nuclear Regulatory Commission

REPLY BRIEF FOR PETITIONER

ROSS SANDLER

122 East 42nd Street
New York, New York 10017
Telephone: (212) 949-0049

JOHN ROGER BEERS

HELENE M. LINKER

2345 Yale Street
Palo Alto, California 94306
Telephone: (415) 327-1080

*Attorneys for Natural Resources
Defense Council, Inc.*

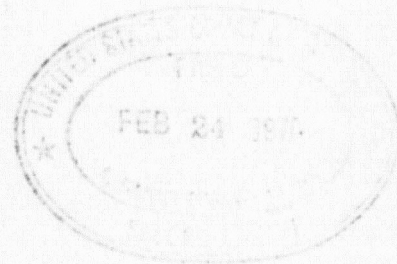


TABLE OF CONTENTS

	<u>Page</u>
TABLE OF AUTHORITIES	ii
I. SUPPLEMENTARY STATEMENT OF THE CASE	1
II. ARGUMENT	9
A. The Response Of The NRC And Intervenors Misconceives The Relief Sought In The Petition And In This Suit.	9
B. The Policies And Structure Of The Atomic Energy Act Clearly Require The Safety Finding Requested By The Petition.	13
1. The AEA and Subsequent Legislation	13
2. The Principles Established in Cases Decided Under the National Environmental Policy Act	18
C. Administrative Practice And Legislative History Do Not Support A Different Result	20
1. The NRC's Statutory Inter- pretation	20
2. Legislative History	22
D. The NRC's Decision Is An Attempt To By-Pass The Required Safety Finding In Order To Insulate The Waste Disposal Issue From Public And Judicial Review	28
III. CONCLUSION	32

TABLE OF AUTHORITIES

Page (s)

CASES

<u>Adamo Wrecking Co. v. United States,</u> <u>U.S. , 46 U.S.L.W. 4063</u> <u>(January 10, 1978)</u>	21
<u>Calvert Cliffs' Coordinating</u> <u>Committee v. AEC, 449 F.2d 1109</u> <u>(D.C.Cir. 1971).</u>	15
<u>Citizens for Safe Power v. NRC,</u> <u>524 F.2d 1291 (D.C.Cir. 1975)</u>	19, 31
<u>Citizens to Preserve Overton Park, Inc.</u> <u>v. Volpe, 401 U.S. 402 (1971)</u>	31
<u>Consumers Union of U.S. v. Consumer</u> <u>Product Safety Commission, 491</u> <u>F.2d 810 (2d Cir. 1974).</u>	31
<u>Fishgold v. Sullivan Drydock & Repair</u> <u>Corp., 154 F.2d 785 (2d Cir. 1946)</u> <u>aff'd 328 U.S. 275 (1946)</u>	20, 26, 27
<u>FTC v. Jantzen, Inc., 386 U.S. 228</u> <u>(1967)</u>	22
<u>International Harvester Co. v.</u> <u>Ruckelshaus, 478 F.2d 615</u> <u>(D.C.Cir. 1973).</u>	13, 32
<u>Kennecott Copper v. EPA, 462 F.2d</u> <u>846 (D.C.Cir. 1972)</u>	30
<u>National Petroleum Refiners Ass'n</u> <u>v. FTC, 482 F.2d 672 (D.C.Cir.</u> <u>1973), cert. denied 415 U.S. 951</u> <u>(1974)</u>	21, 27, 28
<u>Natural Resources Defense Council v.</u> <u>NRC, 547 F.2d 633 (D.C.Cir. 1976),</u> <u>cert. granted sub nom. Vermont Yankee</u> <u>Nuclear Corp. v. Natural Resources</u> <u>Defense Council, 429 U.S. 1090 (1977)</u>	15, 19
<u>Natural Resources Defense Council v.</u> <u>SEC, 432 F. Supp. 1190 (D.D.C. 1977),</u> <u>appeal docketed, No. 77-1761 (D.C.</u> <u>Cir., August 22, 1977)</u>	30, 31

TABLE OF AUTHORITIES (Continued)

	<u>Page(s)</u>
<u>CASES (continued)</u>	
<u>NRDC v. Train</u> , 545 F.2d 320 (2d Cir. 1976)	28
<u>Power Reactor Development Co. v. International Union</u> , 367 U.S. 396 (1961)	14, 21, 27, 29
<u>Rockbridge v. Lincoln</u> , 449 F.2d 567 (9th Cir. 1971)	14
<u>Scenic Hudson Preservation Conference v. FPC</u> , 354 F.2d 608 (2d Cir. 1965), <u>cert. denied</u> 407 U.S. 926 (1972)	15
<u>SEC v. Chenery Corp.</u> , 318 U.S. 80 (1943)	31
<u>Siegel v. AEC</u> , 400 F.2d 778 (D.C.Cir. 1968)	14, 30
<u>Sierra Club v. Dept. of Interior</u> , 376 F. Supp. 90 (N.D. Cal. 1975)	14
<u>Skidmore v. Swift & Co.</u> , 323 U.S. 134 (1944)	20, 21, 27
<u>Thompson v. Clifford</u> , 408 F.2d 154 (D.C.Cir. 1968)	21, 27
<u>Wellford v. Ruckelshaus</u> , 439 F.2d 598 (D.C.Cir. 1971)	31
<u>STATUTES</u>	
Atomic Energy Act of 1954, 42 U.S.C. §§ 2011 <u>et seq.</u> , as amended by the Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801 <u>et seq.</u>	<u>passim</u>
42 U.S.C. § 2133(d)	9

TABLE OF AUTHORITIES (Continued)

Page(s)

STATUTES (Continued)

Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801 <u>et seq.</u>	<u>passim</u>
42 U.S.C. § 5811	18
42 U.S.C. § 5842	18
42 U.S.C. § 5842(3)	16
42 U.S.C. § 5843(b)(2)(B)	18
42 U.S.C. § 5844(b)(1)	18
42 U.S.C. § 5844(b)(2)(B)	18
42 U.S.C. § 5877(c)(5)	18

Department of Energy Organization Act of 1977, 42 U.S.C. §§ 7101 <u>et seq.</u>	<u>passim</u>
42 U.S.C. § 7133(a)(8)	16

National Environmental Policy Act, 42 U.S.C. §§ 4321 <u>et seq.</u> (1970)	<u>passim</u>
---	---------------

REGULATIONS

10 C.F.R. § 50.34a(b)(3) (1976)	15
10 C.F.R. Part 50, Appendix F	18
10 C.F.R. § 2.700	30
10 C.F.R. § 2.760	30
10 C.F.R. § 2.770	30

LEGISLATIVE MATERIALS

<u>Hearings on Industrial Radioactive Waste Disposal before Subcommittee of JCAE, 86th Cong., 1st Sess. (1959)</u>	26
--	----

<u>Summary Analysis of Hearings on Industrial Radioactive Waste Disposal before Special Subcommittee of the Joint Committee on Atomic Energy [JCAE], 86th Cong., 1st Sess. (1959)</u>	24
---	----

<u>Hearings on Development, Growth, and State of Atomic Energy Industry before JCAE, 87th Cong., 1st Sess. (1961)</u>	25
---	----

<u>Hearings on Development, Growth, and State of Atomic Industry before JCAE, 87th Cong., 2d Sess. (1962)</u>	25
---	----

TABLE OF AUTHORITIES (Continued)

Page(s)

LEGISLATIVE MATERIALS (Continued)

<u>Hearings on AEC Authorizing Legislation,</u> <u>Fiscal Year 1966, before JCAE, Part 2,</u> <u>89th Cong., 1st Sess. (1965)</u>	24
<u>Selected Materials on Environmental Effects</u> <u>of Producing Electric Power, JCAE, 91st Cong.,</u> <u>1st Sess. (1969)</u>	25
<u>Hearings on S. 2135 and S. 2744 before</u> <u>Subcommittee of Senate Committee on</u> <u>Government Operations, 93rd Cong., 2d</u> <u>Sess. (1974)</u>	24
<u>Hearings on ERDA Authorizing Legislation</u> <u>for Fiscal Year 1976 before Subcommittee</u> <u>of JCAE, 94th Cong., 1st Sess. (1975)</u>	25
<u>Hearings on S. 826 and S. 591 before</u> <u>Senate Committee on Governmental Affairs,</u> <u>95th Cong., 1st Sess. (1977)</u>	27
<u>Nuclear Waste Management: Oversight</u> <u>Hearings Before the Subcomm. on Energy</u> <u>and the Environment of the House Comm.</u> <u>on Interior and Insular Affairs, 95th</u> <u>Cong., 1st Sess. (1977)</u>	8
<u>S. Rep. No. 93-980, 93rd Cong., 2d Sess.</u> <u>(1974)</u>	16

OTHER SOURCES

<u>General Accounting Office, Report to the</u> <u>Congress, The United States Nuclear Energy</u> <u>Dilemma: Disposing of Hazardous Radioactive</u> <u>Wastes Safely (September 9, 1977)</u>	3, 4
<u>Leventhal, Environmental Decisionmaking and</u> <u>the Role of the Courts, 122 U.Pa.L.Rev. 509 (1974).</u>	32

TABLE OF AUTHORITIES (Continued)

	<u>Page(s)</u>
 <u>OTHER SOURCES (Continued)</u>	
<u>M. Willrich and R.K. Lester, Radioactive Wastes, Management and Regulation (1977)</u>	8
<u>News Releases, United States Nuclear Regulatory Commission, Office of Public Affairs, Vol. III, No. 4 (Week ending February 2, 1977)</u>	7
<u>News Releases, United States Nuclear Regulatory Commission, Office of Public Affairs, Vol. III, No. 43 (Week ending December 13, 1977)</u>	7
<u>Northern States Power Co. (Prairie Island Nuclear Generating Plant 1 & 2) and Vermont Yankee Nuclear Corp. (Vermont Yankee Nuclear Power Station), ALAB No. 455 (January 27, 1978) (Slip Opinion)</u>	29
<u>Nuclear Fuel Cycle Committee, California Energy Resources Conservation and Development Commission, Status of Nuclear Fuel Reprocessing Spent Fuel Storage and High-Level Waste Disposal, Draft Report (January 11, 1978)</u>	7
<u>Oakes, The Judicial Role in Environmental Law, 52 N.Y.U.L.Rev., 498 (1977)</u>	13
<u>Report to the American Physical Society by the Study Group on Nuclear Fuel Cycles and Waste Management (July 1977)</u>	3

I. SUPPLEMENTARY STATEMENT OF THE CASE

The radioactive wastes which are the subject of the petition are generated by commercial power reactors and consist principally of either the "spent" fuel rods removed from a reactor core or the wastes which would result from reprocessing of this spent fuel (depending upon whether it federal policy to defer reprocessing remains in effect).^{1/} These spent fuel rods will be stored on an interim basis (for a period of approximately 5-20 years) at the reactor site, and thereafter they must be stored in virtual perpetuity off-site at a federal repository, if one is developed. The "permanent storage" which succeeds the "interim storage" poses essentially the same kind of threats to public health and safety, but vastly greater -- and potentially intractable -- technical and institutional problems because of the geologic periods of containment necessary. Yet, in licensing reactors, the Nuclear Regulatory Commission (NRC) limits its safety analysis to the interim storage at the reactor site and does not consider whether the wastes can be

^{1/} In the petition, "high level" wastes were broadly defined to include the above categories, which are clearly the result of reactor operation, and the NRC accepted petitioner's definition for purposes of the petition. R. 507, App. 221. Thus, the implication in the Power Authority Brief at pages 4-6 that high-level wastes are not generated by commercial reactors, is erroneous. (For convenience, the opposing briefs will be referred to by the name of the first listed party submitting the brief: "NRC Brief," "Boston Edison Brief," and "Power Authority Brief.")

feasibly stored on a permanent basis.

As previously noted, the government's efforts to find a safe means of disposing of these wastes have been plagued by a series of missteps, changes in direction and aborted plans. While the NRC does not appear to dispute these matters in its brief, intervenors characterize this program as a "careful and generally successful approach." Boston Edison Brief at 21. That interpretation requires that failures be recast as fact-gathering endeavors.

For example, in our opening brief (pages 11-14), we have described the ill-conceived program in the 1960's to establish a waste repository at West Valley, New York. When the government thereafter switched its planning to develop deep geologic disposal in salt beds, the initial site at Lyons, Kansas, was selected without adequate and early consideration of the potential difficulties. The technical problems encountered were not, as intervenors suggest, close to solution, but were in large measure the reason for the cancellation. See NRC Brief at 30. The government's shift in emphasis thereafter to retrievable surface storage was short-lived when further investigation, especially review by the Environmental Protection Agency, suggested that it was even less acceptable as a long-term storage option. The program again turned to deep geologic disposal. See NRC Brief at 32, n. 23. While no doubt the government has learned from past mistakes and errors, these past efforts scarcely fulfill the design of a well-organized research and development program, as the intervenors contend.

We are now advised that the government has embarked on an "increased" effort to solve the waste disposal problem. See, e.g., Boston Edison Brief at 26. However, this latest effort, only in its infant stages, has already lagged seriously behind the projected schedule. In 1977, the Energy Research and Development Administration (ERDA) (now the Department of Energy (DOE)) failed to meet its deadline for issuance of a draft generic impact statement which was promised "no later than the early part of the year" and the NRC failed to publish scheduled draft standards for solidifying high-level waste and draft criteria for siting, engineering and operating a waste repository.^{2/} These slippages in the schedule will no doubt delay the overall project schedule,^{3/} and most recently, the management contractor for the program bowed out, dealing a further significant setback to the program.

Overall, the NRC staff does not share the intervenors' view that efforts to develop a waste disposal facility have been sufficiently diligent. The NRC staff analysis in the record herein noted that in the past "there was little sense of urgency in resolving the problem of permanent disposal." R. 4522;

^{2/} Report to the American Physical Society by the Study Group On Nuclear Fuel Cycles and Waste Management, Chapter VII at 76 (July 1977).

^{3/} General Accounting Office, Report to the Congress, The United States Nuclear Energy Dilemma: Disposing of Hazardous Radioactive Wastes Safely 30-31 (September 9, 1977).

The intervenors also assert that the existence of large inventories of radioactive wastes resulting from weapons production by the military provides strong impetus for the development of disposal facilities for commercial wastes. Actually, the military waste program provides little reason for confidence that safe commercial waste disposal will ever be achieved. Major leaks of these military wastes have occurred, totaling well over one-half million gallons, from the storage tanks at two of the federal installations (R. 328, 350), and a government decision to convert the liquid waste in these tanks to a salt cake material, in order to minimize

^{4/} On the other hand, the NRC in its brief suggests that the availability of interim storage renders the development of an ultimate disposal solution less pressing. NRC Brief at 16. However, the change in federal policy regarding reprocessing has increased the spent fuel storage requirements, placed a strain on existing spent fuel storage capacity, and has necessitated NRC approval of higher amounts of spent fuel storage in existing ponds without adequate study. General Accounting Office, Report to the Congress, The United States Nuclear Energy Dilemma: Disposing of Hazardous Radioactive Wastes Safely ix (September, 1977). The strain on commercial interim storage facilities has even forced the federal government to propose a stop-gap program for the development of federal interim storage facilities for the commercial wastes. This proposal is, however, only at the most rudimentary stages. The brief DOE press release cited by the NRC as documentation of this program is in fact the only official publication on the matter. NRC Brief at 8, n. 5. If this program comes to fruition, it is at best years away.

leaks, has only exacerbated the problem.^{5/}

Finally, there is, at a minimum, a substantial unresolved dispute over the intervenors' view that safe, permanent disposal is now technically achievable. Indeed, the very references the intervenors rely on reveal the state of the uncertainty. None of these studies claim that a safe technology has in fact been demonstrated. At most, they indicate that there are no "insurmountable problems," and combine this assessment with a call for additional research. See Boston Edison Brief at 18-20.^{6/}

^{5/} The salt cake is more corrosive and must be removed to ensure adequate long-term safety. R. 334. However, as damp solids, the wastes can no longer be simply pumped out of the tanks, and at present, the technology to remove the waste from the tanks does not exist. R. 343.- Even if technologically feasible, the cost of removing the solidified waste is high, with estimates ranging from 2 to 20 billion dollars. R. 214; App. 92.

Intervenors have also attempted to minimize the significance of the commercial waste problem by asserting that the volume of military wastes is greater. Boston Edison Brief at 9-11. The most meaningful way of measuring radioactive waste is in terms of toxicity, not volume. By this measure, the NRC itself has acknowledged that the inventories of commercially-generated wastes are already roughly comparable to existing military inventories, and the inventory of commercial wastes will outstrip the military wastes by a factor of two within three to four years. R. 953.

^{6/} The principal assessment relied upon by intervenors here is the so-called Technical Alternatives Document, issued by ERDA. R. 3058-4511. While at first glance the selected portions of that document seem to support their claim, a closer reading of the surrounding text, not cited by intervenors, demonstrates that the document in fact states that some of the necessary items of technology are still "under development." R. 3079. Moreover, the discussion of commercially "available technology," to which intervenors point, actually refers to technology for handling low-level radioactive waste, not the high-level waste which is the subject of this petition. R. 3126.

Moreover, as noted more fully in petitioner's opening brief at pages 11-19, many experts in the nuclear field have voiced their concern that the solution to the waste disposal problem is still clouded in uncertainty. Most recently, the California Energy Resources Conservation and Development Commission has completed a survey of the federal waste disposal program and has concluded that the development of safe waste disposal technology is currently problematic:

"We conclude after this extensive review that substantial scientific evidence is lacking even to confirm the feasibility of waste isolation in geologic formations, the most advanced disposal option. Therefore, it is clear that a permanent and terminal waste disposal technology has not been developed and demonstrated. This conclusion on the lack of demonstration is consistent with the statements of several cognizant officials and groups. We agree that the mined cavity geologic disposal concept has merit, along with other options, on the basis of certain inferred or postulated features. We do not believe there is sufficient evidence at this time either to say that the geologic disposal option will fail or it will succeed. Evidence to confirm or reject the feasibility of the concept is still required, just as it has been since the NAS made its initial recommendations in 1957." 7/

Two of the present four Commissioners of the NRC itself have recently expressed concern that the long-term disposal of

7/ Nuclear Fuel Cycle Committee, California Energy Resources Conservation and Development Commission, Status of Nuclear Fuel Reprocessing, Spent Fuel Storage and High-Level Waste Disposal (Draft Report, January 11, 1978). The passage cited was officially adopted as a conclusion and finding of the full Commission on January 25, 1978.

radioactive wastes is receiving inadequate regulatory attention. Commissioner Victor Gilinsky stated that our waste management effort is "at a rudimentary stage of development."^{8/} Commissioner Peter A. Bradford was critical of the very NRC policy at issue in this case:

"First, some major issues are addressed superficially, if at all during the licensing of individual reactors. These issues include waste disposal, decommissioning, conservation or other alternatives, and a host of so-called 'generic' safety issues. They are seen as having been shunted aside during the individual proceedings to be dealt with at the Commission's leisure, outside of the time pressure imposed by a particular permit request. Of course, once the individual plants are in operation and furnishing a significant portion of a given state's or region's electricity, it is much more difficult for the deferred issues to be examined within a framework that permits serious consideration of whether a plant or a type of plant should have been permitted to commence operation at all."^{9/}

Petitioner does not believe that the waste disposal problem is necessarily insoluble. Rather, we believe, as

^{8/} Testimony before the California Energy Resources Conservation and Development Commission, Informational Hearings on Nuclear Fuel Reprocessing and Waste Disposal (January 31, 1977); reprinted in News Releases, United States Nuclear Regulatory Commission, Office of Public Affairs, Vol. III, No. 4 at 2 (Week ending February 2, 1977).

^{9/} Remarks before the American Nuclear Society, Winter Meeting, San Francisco, California (November 29, 1977); reprinted in News Releases, United States Nuclear Regulatory Commission, Office of Public Affairs, Vol. III, No. 43 at 5 (Week ending December 13, 1977).

indicated by the discussion above, that substantial uncertainty currently surrounds this question, and that it is irresponsible to continue blindly licensing reactors which will generate further wastes without regard to whether safe disposal of these wastes is feasible. Even if reasonable assurance of safe future disposal could be demonstrated, the full incentive to develop such a facility on a timely basis will not be present unless the regulatory link is made now between reactor licensing and waste disposal.^{10/}

Thus, while we are more unsure of the prospects for development of safe waste disposal, we share the views of the authors of a recent study that this problem must be addressed now:

"There is today no long-term management of radioactive wastes, no comprehensive scheme for regulation of such waste, and no commercial reprocessing industry in the United States. We believe that institutions can be developed which will provide reasonable assurance of safe management of radioactive wastes in the United States and elsewhere in the world. There is an opportunity to do so now, but it may well be the last clear chance."^{11/}

^{10/} The intervenors contend that the testimony presented by Dr. Terry R. Lash, staff scientist at NRDC, at Congressional hearings was somehow inconsistent with NRDC's position espoused herein. Boston Edison Brief at 6, n. 5. In responding to a question concerning the availability of technology for safe waste disposal, Dr. Lash stated: "While there is no evidence ... that says in principle you cannot safely dispose of wastes, there are some uncertainties and those uncertainties have to be explored." Nuclear Waste Management: Oversight Hearings Before the Subcomm. on Energy and the Environment of the House Comm. on Interior and Insular Affairs, 95th Cong., 1st Sess. 78 (1977). This statement is fully consistent with NRDC's position before this Court. We ask only, as did Dr. Lash, that the NRC get on with the task of resolving, through a definitive finding of safety, those uncertainties surrounding the waste disposal issue.

^{11/} M. Willrich and R.K. Lester, Radioactive Wastes, Management and Regulation 121 (1977).

II. ARGUMENT

A. The Response Of The NRC And Intervenors Misconceives The Relief Sought In The Petition And In This Suit.

The statute which this Court must construe precludes the issuance of a nuclear reactor license if it "would be inimical to ... the health and safety of the public." 42 U.S.C. § 2133(d). The NRC and intervenors apparently agree that the generation of additional quantities of radioactive waste is the inevitable consequence of further reactor licensing; that the permanent disposal of these wastes is an important matter of concern in the protection of public health and safety; and that no facilities currently exist for this permanent disposal. They would presumably agree that substantial controversy exists over the feasibility or timing of ultimate disposal.

The crux of petitioner's claim is that the NRC is charged with responsibility under the Atomic Energy Act (AEA) to determine, based on a thorough review of the feasibility of waste disposal development, whether the continued licensing of power plants is inimical to public health and safety. We ask that this Court vacate the NRC's decision denying the petition and remand the matter to the agency to conduct the inquiry necessary to make the definitive safety finding. The opposition of the NRC and intervenors to the petition is based on their apparent misconception that the safety review sought by it would inevitably precipitate a moratorium on power plant licensing. Their principal response is that Congress

never intended for such a moratorium to occur. They have, however, apparently chosen to ignore the unequivocal statements in petitioner's opening brief that no moratorium was sought by the petition.^{12/}

The NRC and intervenors apparently contend that there are no major technological or institutional obstacles to the development of a safe disposal facility. If they are correct, then the "reasonable assurance" of safety required to license a reactor may well exist and the NRC could so determine in the definitive safety finding which it now abjures. Thereafter, it could monitor progress in the development of a waste disposal facility in order to ensure that the development timetable which justifies further reactor licensing, continues to be met.

On the other hand, if the NRC determines, as some evidence cited by petitioner suggests, that "reasonable assurance" does not now exist that radioactive wastes can and will be safely disposed of, then a moratorium on reactor licensing would be

^{12/} Moreover, petitioner emphasized in its opening brief (pages 21, 22) that this "reasonable assurance" of safety required to license reactors does not necessarily depend on whether a waste disposal facility is in place, but could be based upon a finding that the technology exists for safe permanent disposal, that it will be fully implemented and that reactor licenses are conditioned on compliance with appropriate deadlines for the development of disposal facilities.

Nor does petitioner seek from this Court any injunction against power plant licensing pending a generic safety determination by the NRC. Rather, we have assumed that if this Court determines that the NRC is in fact required to conduct this safety review, it can be accomplished expeditiously and its results available for use in further individual power plant licensing without undue delay.

required not merely by the mandate of the AEA, but as an absolute necessity for the protection of the public health and safety. It would indeed be ironic if that agency refrained from considering this question precisely because the reasonable assurance was lacking and the threat to public health and safety was too grave.

It is asserted, however, by the NRC and intervenors, that the appropriate time to consider safety is not when the reactors which generate the waste are licensed but only when the DOE applies at some indefinite future time for a license for a waste disposal facility.^{13/} Thus, the protection of public health and safety is staked solely on the unstated assumption that DOE will develop a safe waste disposal facility at a later date. The Commission refuses to take affirmative action now to determine whether there is reasonable assurance that this assumption is correct. Obviously, there is no guarantee that the DOE will ever develop an acceptably safe waste disposal facility and consequently no guarantee that NRC proceedings to license such a facility will ever be initiated.^{14/}

^{13/} Some utilities are unwilling even to concede that the NRC has licensing authority over such a waste disposal facility. See Power Authority Brief at 7, n. 8.

^{14/} The NRC staff appears to recognize that these circumstances could force it to accept a less adequate disposal facility, just in order to have a facility. This regulatory gap was described as follows:

"The NRC cannot forever discharge its health and safety responsibilities through the refusal of a license for the disposal of the wastes. For a reactor or other fuel cycle facility, the NRC discharges (continued on next page)

The argument of the NRC and intervenors in support of this regulatory gamble is ambivalent. First, they assert that Congress has exempted any question of waste disposal from the safety review in reactor licensing. They rely upon a confused and random assortment of statements made to Congress at various times since the passage of the AEA. However, as discussed below, Congress was never advised that the agency is not conducting a safety review of the feasibility of waste disposal in connection with reactor licensing. It is thus impossible to infer congressional blessing of the NRC's practice from congressional inaction, as the NRC and intervenors attempt.

Ultimately, neither the NRC nor the utilities which have intervened in this proceeding are comfortable with the notion that the NRC can discharge its reactor licensing responsibilities under the AEA entirely without regard to whether the wastes generated by these reactors can be disposed of safely. While eschewing any formal safety finding, the NRC variously asserts that this question is dealt with in reactor licensing through an "implicit finding" (R. 519; App. 233), or as a "matter of policy" (NRC Brief at 11) or through an "understanding" (See note 26, infra). We are told that the definitive safety finding required by the AEA may be deferred because of the Commission's

14/ (Continued from previous page)

its health and safety responsibilities through the review process and can ultimately refuse a license if the NRC criteria are not likely to be met. For a waste disposal system, a refusal merely postpones the ultimate discharge of these responsibilities." R. 4532; App. 310.

"reasonable confidence" that the waste disposal problem will be resolved, but no justification is given for the Commission's reliance on the application of this lesser standard.

The NRC misses the point when it asserts that the source of petitioner's claim is "at bottom a disagreement over how much uncertainty should be tolerated in reaching health and safety judgments." NRC Brief at 21. Petitioner's claim arises in fact because the NRC has failed to reach a health and safety judgment in a manner which is subject to meaningful public scrutiny and judicial review.

In this era when vitally important issues of public safety turn on predictions concerning available technologies and scientific know-how, the court's function is to ensure that the agency has demonstrated that its decisionmaking is well grounded in realistic assumptions and verified methodologies. See International Harvester v. Ruckelshaus, 478 F.2d 615 (D.C.Cir. 1971); Oakes, The Judicial Role in Environmental Law, 52 N.Y.U. L.Rev. 498, 506 (1977). The relief sought by this petition is necessary to compel the NRC to perform this responsibility.

B. The Policies And Structure Of
The Atomic Energy Act Clearly
Require The Safety Finding
Requested By The Petition.

1. The AEA and Subsequent
Legislation

The NRC and intervenors argue that Congress' broad delegation of licensing authority to the NRC granted virtually unfettered discretion to determine the appropriate scope of its

health and safety review. See NRC Brief at 19. This delegation of authority does not, however, vest the agency with "unbridled discretion to refuse to regulate." Rockbridge v. Lincoln, 449 F.2d 567, 572 - 573 (9th Cir. 1971); Sierra Club v. Dept. of Interior, 376 F. Supp. 90, 95 (N.D.Cal. 1975). While the NRC clearly has the authority to determine in the first instance what would constitute "reasonable assurance" that the wastes generated by reactors will ultimately be disposed of safely, it does not have discretion under the AEA to dispense with this regulation altogether.^{15/}

The NRC and intervenors also argue that the feasibility of waste disposal need not be considered in the reactor licensing, since the permanent disposal of radioactive wastes is neither an activity authorized by a reactor operating license nor an activity which takes place at the reactor site. Boston Edison

^{15/} Intervenor misread Power Reactor Development Co. v. International Union, 367 U.S. 396, 404 (1961), when they imply that it requires this Court to defer to the agency's judgment in refusing to make a definitive safety finding. Boston Edison Brief at 46. In fact, as we have demonstrated in the opening brief (pages 37-39), Power Reactor requires that the agency make its definitive safety finding concerning radioactive waste at the "last clear chance" for prevention of public harm. That opportunity, obviously, is lost after the licensing of the operation of the reactor which generates that waste. Similarly, in Siegel v. AEC, 400 F.2d 778, 784 (D.C.Cir. 1968), also cited in the Boston Edison Brief, the court independently determined that the AEC's policy was "within the limits of the powers delegated to it by Congress." The court in Siegel held that the public health and safety concerns in the AEA were those associated with the operation of the nuclear industry itself (which would include the generation and disposal of radioactive wastes). On this basis, it held that the possibility of foreign enemy attacks upon this country need not be considered in individual licensing proceedings.

Brief at 48-52. Petitioner submits that the regulatory structure mandated by the AEA is neither so neatly compartmentalized nor so devoid of foresight as the NRC and intervenors would have it. In the first place, while the activities authorized by a reactor operating license do not include the disposal of radioactive wastes, they clearly do include the generation of radioactive wastes, such as the spent fuel removed from the reactor core. These wastes must be stored in perpetuity somewhere, and it is equally absurd for the NRC to adopt the artificial perspective that limits safety concerns to the boundaries of the reactor site.^{16/} See Natural Resources Defense Council v. NRC, 547 F.2d 633 (D.C.Cir. 1976), cert. granted sub nom. Vermont Yankee Nuclear Corp. v. Natural Resources Defense Council, 429 U.S. 1090 (1977) (hereinafter "Vermont Yankee").^{17/}

^{16/} It should be noted that the NRC's regulations are inconsistent in requiring that the safety of off-site transportation of radioactive wastes be determined in the context of licensing reactors. 10 C.F.R. § 50.34a(b)(3) (1976).

^{17/} Intervenor's concern for the supposed burden on private applicants if information relating to waste disposal must be produced, places licensing convenience above the statutory mandate to keep "the problem of safety uppermost in mind." Power Reactor Development Co. v. International Union, 367 U.S. 396, 414 (1961). In fact, no additional burden would necessarily be imposed on any individual reactor licensing applicant by the NRC's performance of this safety review, since that safety review could be conducted most expeditiously in a generic hearing apart from any particular reactor licensing. See Vermont Yankee, supra, 547 F.2d at 641, n. 17. In any event, the ultimate responsibility to develop the safety record rests with the NRC itself. Id. at 645; Calvert Cliffs' Coordinating Committee v. AEC, 449 F.2d 1109, 1119 (D.C.Cir. 1971). See also Scenic Hudson Preservation Conference v. FPC, 354 F.2d 608, 620-621 (2d Cir. 1965), cert. denied, 407 U.S. 926 (1972).

On the other hand, the NRC and intervenors assert that the assignment of authority to the NRC to license waste disposal facilities, under Section 202(3) of the Energy Reorganization Act (ERA), 42 U.S.C. § 5842(3), in itself reflects Congressional intent that the feasibility of waste disposal be considered solely in that context. See, e.g., Power Authority Brief at 14. Nothing in the ERA or its legislative history supports this interpretation. The thrust of the ERA was to separate responsibility for regulation from responsibility for development, where the two had been merged in the AEC. S. Rep. No. 93-980, 93rd Cong., 2d Sess. 2 (1974). Thus, Section 202(3) of the ERA was passed in order to ensure that separate regulatory authority would exist in the NRC over waste disposal facilities to be developed by ERDA (later DOE).^{18/} There was, however, no need for Congress to address the issue of radioactive waste disposal considerations in the reactor licensing context in the ERA since even under the AEC's jurisdiction, development and regulatory responsibilities for nuclear reactors had been split between third party utilities and the AEC.^{19/}

^{18/} This dual agency scheme was carried forward in Section 203(a)(8) of the recent Department of Energy Organization Act (DEOA), 42 U.S.C. § 7133(a)(8) (1977), without changes relevant to the present issue.

^{19/} It is equally irrelevant to argue the essentially semantic question of whether DOE, rather than the NRC, has "paramount waste management responsibility." See Power Authority Brief at 14. As evidenced by ERA § 202(3) and DEOA § 203(a)(8), Congress clearly intended for the NRC to have regulatory responsibility.

We have previously noted that deferral of any determination of the feasibility of waste disposal to some indefinite time when the DOE may file a license application for a disposal facility ignores the present substantial uncertainties whether any safe disposal of radioactive wastes is feasible or whether the timing will be adequate. The sole response of the NRC and intervenors is that this Court must assume that DOE will develop a safe disposal facility because of the "long standing doctrine which presumes agency regularity." Power Authority Brief at 21. The notion that such a legal fiction can serve as a complete answer for safety concerns is simply absurd -- particularly in the face of the substantial evidence of technical difficulties and past government failures in meeting this problem. The cases relied on by the intervenors suggest only that the presumption of regularity applies to an agency's performance of procedural duties in agency hearings or other proceedings.

In sum, the AEA establishes the basic safety mandate which underlies the NRC's review function in the licensing of power reactors. As we have noted, neither the Energy Reorganization Act nor the recent Department of Energy Organization Act alter the sweep of this mandate.^{20/}

^{20/} The ERA does contain provisions discussed in petitioner's opening brief at page 36, which are indicative of a pre-existing intent that this safety review not be strictly limited to the reactor facility or site. Intervenors suggest that these provisions are inapt. Power Authority Brief at 15, 16. For example, they assert that Section 203(b)(2)(B) of the ERA, which relates the reactor safety assessment to "transporting and storing high-level radioactive wastes," is concerned solely with on-site activities. However, the cited (Continued on next page)

2. The Principles Established
in Cases Decided Under the
National Environmental Policy
Act

In petitioner's opening brief (pages 39-43), we cited a number of cases decided pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq., which establish certain principles of decisionmaking which are applicable by analogy to the NRC's reactor safety finding under the AEA. We do not contend that NEPA imposes a separate, specific substantive

^{20/} (Continued from previous page) Conference Report, which assigns to the Office of Nuclear Reactor Regulation authority over "licensing and related regulatory activities within the boundaries of the nuclear reactor . . .," is obviously a reference to the division's licensing jurisdiction and not the scope of the safety inquiry to be undertaken in licensing reactors. Clearly, the "transporting" of radioactive wastes occurs off-site, as discussed supra at page 16. In addition, at the time ERA was passed, the "high-level radioactive wastes" referred to in that Section were defined in agency regulations as the product of reprocessing. 10 C.F.R. Part 50, Appendix F. Thus, the "storing" of these wastes referred to in Section 203(b)(2)(B) would necessarily embrace off-site activities.

Second, intervenors cannot support their claim that nuclear reactors are not included within the licensed "activities" or "facilities" referred to in Sections 307(c)(5) and 204(b)(2)(B), which require efforts to ensure the safe permanent disposal of radioactive wastes or contingency plans for dealing with thefts and sabotage relating to radioactive wastes. Section 307(c)(5) speaks unqualifiedly of "nuclear activities and facilities" and Section 204(b)(2)(B) speaks unqualifiedly of "all activities." Intervenors point to other provisions -- Sections 101, 202 and 204(b)(1) -- where the reference is clearly limited to reprocessing or waste disposal facilities (Power Authority Brief at 15, 16), but these references merely serve to demonstrate that Congress used more limiting language than Sections 307(c)(5) and 204(b)(2)(B) when it meant to exclude nuclear reactors.

duty relating to this safety finding.^{21/} It is well settled that NEPA's decisionmaking framework requires consideration of the full range of secondary, as well as immediate, impacts of a proposed action, prior to a commitment of resources. In the nuclear field, the application of these principles in the Vermont Yankee case required an evaluation of the environmental impacts of waste disposal to be made in the reactor licensing context. Although intervenors admit that such consideration of waste disposal is appropriate in the environmental impact analysis under NEPA, they provide no explanation why consideration of the same issue is somehow inappropriate in the definitive safety finding required under the AEA.

Petitioner agrees with intervenors that the functions performed in reactor licensing by the environmental impact analysis under NEPA and the definitive safety finding under the AEA are very different. Some of the decisionmaking principles under NEPA are applicable by analogy under the AEA, nevertheless. Indeed, in Citizens for Safe Power v. NRC, 524 F.2d 1291, 1299 (D.C.Cir. 1975), precisely because similar concerns permeated the two statutes, the court stressed that the AEA requirements

^{21/} Thus, intervenors' argument that petitioner NRDC is foreclosed from asserting a claim under NEPA here because it was never presented to the NRC (Power Authority Brief at 21-23), is based on a misunderstanding. Petitioner does not assert a separate claim or theory under NEPA for the relief sought. There is no bar to relying on the NEPA cases and principles as analogies in the instant situation. In all events, the papers filed with the NRC did stress the application of NEPA's decisionmaking principles, by the citation of the decision in the Vermont Yankee case.

could not be viewed "separate and apart from NEPA considerations."^{22/}

C. Administrative Practice And Legislative History Do Not Support A Different Result.

1. The NRC's Statutory Interpretation

The NRC and intervenors assert in effect that this Court is bound by the agency interpretation that, as a matter of law, the AEA does not require the safety finding sought by petitioner. NRC Brief at 19. However, as this Court has noted, "upon the courts rests the ultimate responsibility of declaring what a statute means." Fishgold v. Sullivan Drydock & Repair Corp., 154 F.2d 785, 790 (2d Cir.), aff'd, 328 U.S. 275 (1946). Accordingly, the courts have not allowed an agency's interpretation to serve as a roadblock to further judicial inquiry into the matter, but have used an agency's interpretation as an aid to statutory construction only when it was, upon review, considered "persuasive." As the Supreme Court stated in Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944): "The weight of such

^{22/} In Union of Concerned Scientists v. AEC, 499 F.2d 1069 (D.C. Cir. 1974), cited by intervenors, the court was concerned only with the narrow procedural issue of whether an atomic safety and licensing board must perform de novo review, parallel to its impact statement obligation under NEPA, when considering uncontested safety issues under the AEA. The court did not address the issue raised here: whether NEPA's decisionmaking principles should be followed in determining the scope of the safety review.

a judgment in a particular case will depend upon the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking power to control." See also, Adamo Wrecking Co. v. United States, ___U.S. ___, 46 U.S.L.W. 4063, 4066, n. 5 (January 10, 1978).

In both Skidmore and Adamo, it is clear that the court was concerned that the deference accorded an agency's interpretation not stand in the way of a full and comprehensive review of Congress' intent in enacting the statute. See also, Thompson v. Clifford, 408 F.2d 154, 167 (D.C.Cir. 1968) (administrative interpretation "must have a basis in law" and "depends heavily on the validity of the reasoning and in logical bridge between statute and regulation"). Moreover, as we noted in the opening brief (pages 44, 45), the agency's interpretation is entitled to less weight when the question is not one peculiarly within the agency's field of expertise, but is rather simply one of statutory interpretation. See also, National Petroleum Refiners Association v. FTC, 482 F.2d 672, 694 (D.C.Cir. 1973), cert. denied, 415 U.S. 951 (1974).^{23/}

^{23/} Intervenor's argue that the NRC drew upon its expertise in determining "to defer making the requested safety finding because ... the Commission found reasonable confidence that a waste disposal system would be available when needed." Boston Edison Brief at 53. At the very least, whether this is permissible is purely a statutory question. As discussed below at pages 28-30, there is no authority under the AEA or the Supreme Court's decision in Power Reactor that would allow the deferral of the important safety determination, by the application of some less stringent standard.

2. The Legislative History

The AEA was passed and the NRC and its predecessor created with the broad objective of protecting public health and safety in the development of nuclear power. No one disputes the fact that commercial power reactors generate radioactive wastes or that those radioactive wastes pose possible hazards to public health and safety. In these circumstances, we are surely entitled to some unequivocal expression of congressional intent to support any asserted exception for radioactive waste disposal from the broad statutory safety review for power reactor licensing. See, e.g., FTC v. Jantzen, Inc., 386 U.S. 228, 236 (1967).

In fact, the NRC and intervenors are unable to point to any express enactment or statement by Congress to support this exemption from the safety finding requirement. No bill to this effect was ever introduced, much less voted upon; no House, Senate or Conference report ever suggested that such an exception exists; and no member of Congress was ever recorded making any such claim in any hearing or debate.

In their effort to reconstruct legislative intent, the NRC and intervenors rely upon what others have said from time to time to Congress rather than what Congress itself has said. Even here, they are unable to point to a single instance in which Congress was ever advised that the safety review conducted by the NRC (and its predecessor) in licensing power reactors did not include a determination concerning the adequacy of ultimate

disposal plans for the waste generated by those facilities.

Although the petition herein seeks to establish the NRC's obligation to make this safety finding and does not seek a moratorium on reactor licensing per se, the NRC and intervenors rely largely upon Congress' failure to declare any such moratorium to support the alleged exemption. See NRC Brief at 23-40. They assert that Congress was advised of the difficulties encountered in developing an ultimate waste disposal facility; that Congress was aware that power reactors continue to be licensed; and that a number of requests were made of it to declare a moratorium on reactor licensing. On this basis, congressional failure to declare a moratorium is seen as a ratification of the agency's failure to consider the safety of waste disposal in reactor licensing.

We have previously noted in our opening brief (pages 33-36), the pervasive concern for public health and safety reflected in the provisions of the AEA, including those relating to reactor licensing. The lengthy exchange in the House debates on the AEA, quoted in the NRC Brief at pages 24-25, demonstrates that Congress' concern for public health and safety specifically included the hazards of radioactive waste disposal. As stated by Representative Cole:

"Ample provision is made in the bill for the Commission to protect the health and safety of the public. This, of course, includes adequate treatment of and control of these wastes." NRC Brief at 25.

Subsequent to the passage of the AEA, Congress has

received periodic reports on radioactive waste disposal. Contrary to the characterization in the briefs of the NRC and the intervenors, much of the testimony presented to Congress by representatives of the AEC, ERDA and NRC contains exceptionally optimistic assessments of the prospects for the development of a waste disposal facility.

For example, a summary of the evidence presented in hearings in 1959 before a subcommittee of the Joint Committee on Atomic Energy (JCAE), concluded that "apparently feasible solutions to the problem of ultimate disposal of high-level wastes" were under development and that "several years" would be required to demonstrate engineering practicality.^{24/} In 1966, when asked to describe what "the effect of waste disposal may be on the power development program," an AEC representative told the Joint Committee that "[i]f we don't have economically competitive and safe nuclear power, it won't be because we don't know how to dispose of the waste."^{25/} In 1974, representatives of the AEC testified that in essence the waste disposal problem had been answered and that retrievable surface storage, for example, was "a thoroughly proven, safe, flexible technique."^{26/} They

^{24/} Summary Analysis of Hearings on Industrial Radioactive Waste Disposal before the Special Subcommittee of the JCAE, 86th Cong., 1st Sess. 2 (1959).

^{25/} Hearings on AEC Authorizing Legislation, Fiscal Year 1966, before JCAE, Part 2, 89th Cong., 1st Sess. 875 (1965).

^{26/} Hearings on S. 2135 and S. 2744 before the Subcommittee of Senate Committee on Gov't Operations, 93rd Cong., 2d Sess. 338 (1974).

concluded that "the required capabilities for the safe management and disposal of radioactive wastes from the commercial nuclear industry is easily satisfied."^{27/} Again, in 1976, when the emphasis had shifted to the use of bedded salt deposits as a geological repository for the wastes, an ERDA official concluded that "the bedded salt formation can safely accept and contain this material for geological periods of time."^{28/}

One could conclude from these statements that Congress assumed that the development of a radioactive waste facility was a foregone conclusion and that the NRC (or AEC before it)

^{27/} Id. at 345.

^{28/} Hearings on ERDA Authorizing Legislation for Fiscal Year 1976 before Subcommittee of JCAE, 94th Cong., 1st Sess. 1293 (1975). Other examples of such statements are as follows: In 1961, an AEC Commissioner assured the Joint Committee that "[p]romising results are being developed by our program on radioactive waste disposal." Hearings on Development, Growth, and State of Atomic Energy Industry before JCAE, 87th Cong., 1st Sess. 15 (1961). The Joint Committee was told in 1962 that "[t]he waste management program is improving the technology of confinement and disposal of radioactive wastes from reactors and chemical processing plants." Hearings on Development, Growth, and State of Atomic Energy Industry before JCAE, 87th Cong., 2d Sess. 68 (1962). The Joint Committee was again reassured in 1969, when an AEC director stated, "... we are of the strong opinion that there is sufficient technology and sufficient work underway to insure that the radioactive waste disposal problem can be controlled. Even though this problem is unique to nuclear power, we are confident it will pose no significant problem, technically or economically, to providing assurance to the public in perpetuity." Selected Materials on Environmental Effects of Producing Electric Power, JCAE, 91st Cong., 1st Sess. 44-45 (1969). Congress was also assured that "[t]he feasibility and safety of handling highly radioactive materials in an underground environment has been demonstrated, and the stability of salt under the effects of heat has been shown." Id. at 343.

was, from all appearances, performing all of its regulatory responsibilities relating to radioactive waste disposal. At the very least, when all of the testimony referred to in the briefs is examined, "we are left in doubt as to the final impression which [this] testimony as a whole may have left" on Congress. Fishgold v. Sullivan Drydock & Repair Corp., 154 F.2d 785, 790 (2d Cir. 1946). In these circumstances, it is impossible to draw any conclusion from Congress' failure to declare a moratorium on reactor licensing.

The crucial fact, as we have noted, is that Congress was never specifically advised by the NRC, its predecessor, or anyone else that determinations of the feasibility of radioactive waste disposal were not being conducted in connection with decisions to continue reactor licensing. Indeed, testimony was on occasion presented to Congress from which it could have inferred that the NRC's safety determination did include a review of this question.^{29/}

^{29/} For example, in 1959 an AEC representative testified in congressional hearings that "each applicant for a license to construct and operate a nuclear facility" must provide certain information "which will provide, to the Commission's satisfaction, reasonable assurance that the licensed activity will not present undue risk to public health and safety, either from accidental release of radioactive materials or release from routine operations or from disposal of radioactive waste." Hearings on Industrial Radioactive Waste Disposal before Subcommittee of JCAE, 86th Cong., 1st Sess. 2512 (1959) (emphasis added). Similarly, in congressional hearings last year concerning the Department of Energy Organization Act, an NRC representative advised a Senate Committee of the filing of NRDC's petition herein with the NRC, as noted in the Power Authority Brief at pages 19-20, but then reassured the Committee that this safety review function was in fact being performed by the NRC:

"NRC currently licenses nuclear power reactors with the understanding that the wastes from (continued on next page)

No case has ever allowed Congressional silence "to speak" in this kind of ambiguous circumstance. While courts have on occasion relied upon evidence of Congressional knowledge of and acquiescence in an agency's interpretation of its statute, this de facto ratification through silence "is not lightly attributed." National Petroleum Refiners Association v. FTC, 482 F.2d 672, 695 (D.C.Cir. 1973).^{30/} There must in fact be evidence that Congress' attention has been specifically directed to the particular issue. See Fishgold v. Sullivan Drydock & Repair Corp., 154 F.2d 785 (2d Cir. 1946).

Thus, in Thompson v. Clifford, 408 F.2d 154, 164 (D.C. Cir. 1968), the court refused to infer ratification from legislative silence "unless, as a minimum, the existence of the administrative practice is brought home to the legislature."^{31/}

^{29/} (continued from previous page)

these reactors can and will be disposed of without risk to the public health and safety. Our confidence that these wastes will be disposed of adequately is based in part on knowledge of the momentum and priorities of ERDA's programs on nuclear waste management. Change in the timing and priorities then of ERDA's programs could impact the position that the Commission has held thus far on this issue." Hearings on S. 826 and S. 591 before Senate Committee on Governmental Affairs, 95th Cong., 1st Sess. 867 (1977).

^{30/} Where it has suited intervenors' purposes, they have also argued that changes in legislative intent "will not be inferred unless such matter is clearly and indubitably manifested." See cases cited in Boston Edison Brief at 54, n. 114.

^{31/} In Thompson, the court noted that Power Reactor Development Co. v. International Union, 367 U.S. 396 (1961), upon which the NRC and intervenors rely, is clearly a case where the disputed administrative practices were specifically brought to the attention of Congress in hearings. 408 F.2d at 164, n. 65.

In Thompson, reference to the administrative interpretation in a report filed with a Congressional committee was not considered sufficiently prominent to justify any such conclusion. Similarly, in the National Petroleum Refiners Association case, the court stated that "the question before us ... was not confronted straightforwardly and decisively" before Congress, and accordingly, no inference could be drawn from Congressional inaction. 482 F.2d at 686.

These cases reflect a clear reluctance to allow an ambiguous or scattered series of statements before Congress to support any inference which would fundamentally alter underlying important public policies. As the court stated in NRDC v. Train, 545 F.2d 320 (2d Cir. 1976): "We cannot in the absence of an unmistakable directive, construe the Act in a manner which runs counter to the broad goal which Congress intended it to effectuate." 545 F.2d at 325, n. 8.

D. The NRC's Decision Is An Attempt To By-Pass The Required Safety Finding In Order To Insulate The Waste Disposal Issue From Public And Judicial Review

Despite the arguments of the NRC and intervenors that the NRC is not required as a matter of law to make the definitive safety finding requested in the petition, they concede that the NRC has some sort of responsibility to review the progress in developing a waste disposal facility in connection with reactor licensing. See, e.g., NRC Brief at 20. In their view, this determination need not be made in the explicit, formal manner

of the safety finding required by the AEA. The safety finding, according to their contention, can be postponed until some unspecified "appropriate time" in the future. See Boston Edison Brief at 5. This conclusion is based on the NRC's "implicit finding" that it has "reasonable confidence," that wastes will ultimately be disposed of safely.

Petitioner's opening brief (pages 25-32) demonstrated the illegality of this approach. For example, in Power Reactor Development Co. v. International Union, 367 U.S. 396, 406-407 (1961), the Court determined that the AEA required a "positive" and "definitive safety finding" in proceedings to consider the application for an operating license for a reactor. The court gave no indication that this finding could be evaded or deferred, based on peremptory judgments, without full development of the facts behind the Commission's "reasonable confidence."

The ramifications of the use of this informal, ad hoc assessment of "reasonable confidence" in lieu of the requisite safety finding are evident. Indeed, the NRC's own licensing boards apparently consider themselves bound by this confidence assessment, although it was conducted out of public view and pursuant to a weakened standard. Most recently, an atomic licensing and appeal board (ALAB) declined to condition a reactor operating license upon an assessment of the safety of spent fuel disposal, precisely because the NRC in its order denying NRDC's petition, had already determined that "reasonable confidence" exists that spent fuel repositories will be available when needed. Northern States Power Co. (Prairie Island Nuclear Generating Plant 1 & 2) and Vermont Yankee Nuclear Corp. (Vermont Yankee Nuclear

Power Station), ALAB No. 455 (January 27, 1978) (Slip Opinion). The ALAB noted that the NRC's confidence assessment "did not rest upon disclosures in a formal record developed in either a rulemaking or an adjudicatory proceeding." Id. at 17. The ALAB observed that if it had "been compelled to come to grips with that question unaided, it is not certain what results might have been reached." Id. at 14. Nonetheless, the ALAB felt bound to respect the NRC's determination, "unless and until rescinded by the Commission or overturned by the courts." Id. at 18.

It is clear that the Commission's decision cannot itself substitute for the definitive safety finding required by the ALA.^{32/} Even judged by its own terms -- as an assessment of "reasonable confidence" -- the NRC's decision fails to explain adequately the basis for its ultimate conclusion that reasonable confidence of safety exists.

The NRC decision is so perfunctory and superficial, that it falls far short of even the reasoned analysis necessary to support an agency's rulemaking decision. Kennecott Copper v. EPA, 462 F.2d 846 (D.C.Cir. 1972); Natural Resources Defense

^{32/} It should be noted that the NRC assumes that its decision must be reviewed as the denial of a rulemaking, under the standards of the Administrative Procedure Act. However, the definitive safety finding itself, even if made in a generic hearing, would probably be required to meet standards applicable to quasi-adjudicatory proceedings. The NRC has consistently treated reactor licensing under the AEA as a quasi-adjudicatory proceeding, subject to a more stringent standard of judicial review and a full explanation of agency decisionmaking. 10 C.F.R. § 2.700 et seq; Siegel v. AEC, 400 F.2d 778, 785 (D.C.Cir. 1968). Under the NRC regulations, reactor licensing safety findings must be supported by "reliable, probative, and substantive evidence" and a "statement of findings and conclusions ... on all material issues of fact." 10 C.F.R. §§ 2.760, 2.770.

Council v. SEC, 432 F. Supp. 1190 (D.D.C. 1977), appeal docketed, No. 77-1761 (D.C.Cir., Aug. 22, 1977).^{33/} More importantly, the decision does not disclose the NRC's analysis in a way necessary to meaningful judicial review, as the decisions discussed below require.

First, the NRC's decision contains no explanation of how its conclusions were reached in light of the evidence in the record. See SEC v. Chenery Corp., 318 U.S. 80 (1943); Natural Resources Defense Council v. SEC, 432 F. Supp. 1190, 1206 (D.D.C. 1977), appeal docketed, No. 77-1761 (D.C.Cir., Aug. 22, 1977) ("bald assertions" cannot be substituted for "underlying findings of fact"). The decision merely refers to certain ongoing studies which were never intended as safety assessments of radioactive waste disposal, and offers no support for the ultimate conclusion of "reasonable confidence."

Second, the NRC's Decision fails to show that it "was based on all the relevant factors" (Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971)), or that it gave full consideration to all the major evidence. Consumers Union of U.S. v. Consumer Product Safety Commission, 491 F.2d 810, 912 (2d Cir. 1974); Wellford v. Ruckelshaus, 439 F.2d 598, 602 (D.C. Cir. 1971). Also, given the substantial body of technical evidence in the record contrary to its conclusions, the NRC

^{33/} In Dunlop v. Bachowski, 421 U.S. 560 (1975), cited by the NRC, the Court stressed the need for an agency to "delineate and make explicit the basis on which discretionary action is taken, particularly in a case such as this where the decision taken consists of a failure to act...." 421 U.S. at 471 (emphasis added).

failed to meet its burden of demonstrating that its decision was based on reliable predictions and methodology. International Harvester Co. v. Ruckelshaus, 478 F.2d 615, 648 (D.C.Cir. 1973). See also Leventhal, Environmental Decisionmaking and the Role of the Courts, 122 U.Pa.L.Rev. 509, 533-536 (1974). The NRC's decision ignores past evidence of government failures to develop a safe means of radioactive waste disposal. It omits any discussion of the various reports presented to it by petitioner NRDC which demonstrated that there is substantial uncertainty whether the problem of safe waste disposal will be resolved.

In sum, the agency's unexplained conclusions and one-sided references fail to provide this Court with sufficient information to permit meaningful judicial review. The Court is thus effectively stifled in the performance of its function of ensuring that the agency has fulfilled its statutory responsibilities, if this decision is allowed to stand.

III. CONCLUSION

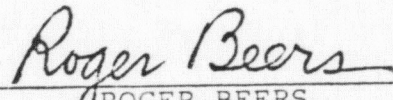
By reason of the foregoing, petitioner NRDC respectfully submits that this Court should vacate the NRC's decision denying the petition, and remand the matter to the agency to conduct further proceedings to determine if it can make the safety finding required by the Atomic Energy Act.

Respectfully submitted,

ROGER BEERS
HELENE LINKER
(Natural Resources Defense Council,
Inc.)
2345 Yale Street
Palo Alto, California 94306
Telephone: (415) 327-1080

ROSS SANDLER
(Natural Resources Defense Council,
Inc.)
122 East 42nd Street
New York, New York 10017
Telephone: (212) 949-0049

DATED: January 31, 1978



ROGER BEERS

Attorneys for Petitioner Natural
Resources Defense Council, Inc.

With the assistance of:

JAMES WEBER
ALAN WALTNER
GAIL GIBONEY

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL, INC.,)

Petitioner,)

v.)

UNITED STATES NUCLEAR REGULATORY)
COMMISSION and UNITED STATES OF)
AMERICA,)

Respondents,)

POWER AUTHORITY OF THE STATE OF NEW)
YORK, et a., AMERICAN ELECTRIC)
POWER COMPANY, et al., BOSTON EDISON)
COMPANY, et al., PENNSYLVANIA POWER)
& LIGHT COMPANY,)

Intervenors.)

No. 77-4157

CERTIFICATE OF SERVICE

I hereby certify that true copies of the REPLY BRIEF
FOR PETITIONER in the above-entitled action were mailed this
31st day of January, 1977, by first class mail from Palo Alto,
California, to the following:

STEPHEN F. EILPERIN, Solicitor
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

CHARLES E. BIBLOWIT
Attorney, Appellate Section
Land and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

EDWARD M. NAGEL
General Counsel and Secretary
Pennsylvania Power & Light Company
Two North Ninth Street
Allentown, Pennsylvania 18101

GEORGE C. FREEMAN, JR.
Hunton & Williams
707 East Main Street
P. O. Box 1535
Richmond, Virginia 23212

HARRY H. VOIGHT
LeBoeuf, Lamb, Leiby & MacRae
1757 N Street, N.W.
Washington, D.C. 20036

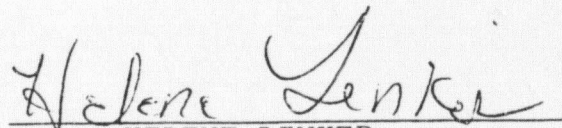
JAY E. SILBERG
Wm. BRADFORD REYNOLDS
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

EVELLE J. YOUNGER, Attorney General
R. H. CONNETT, Assistant Attorney General
CRAIG C. THOMPSON, Deputy Attorney General
555 Capitol Mall, Suite 350
Sacramento, California 95814

KATHRYN BURKETT DICKSON
Energy Resources Conservation &
Development Commission
1111 Howe Avenue
Sacramento, California 95825

JOHN W. GRIGGS
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

L. MANNING MUNTZING
Doub, Purcell, Muntzing & Hansen
1775 Pennsylvania Avenue, N.W.
Washington, D.C. 20006


HELENE LINKER

Attorney for Natural Resources
Defense Council, Inc.

